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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,225	02/27/2004	Richard J. Church	M 5796 PCT/US	7959
423	7590	05/11/2007		
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			EXAMINER ZHENG, LOIS L	
			ART UNIT 1742	PAPER NUMBER
			MAIL DATE 05/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/789,225

Applicant(s)

CHURCH, RICHARD J.

Examiner

Lois Zheng

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/27/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of invention group I, claims 1-14 in the reply filed on 28 February 2007 is acknowledged. The traversal is on the ground(s) that all claim types depend from the same independent composition claim and the claimed coated substrate cannot be made by a different chemical conversion coating process. This is not found persuasive because although the process and product claims depend from the same independent composition claims, they are directed to different types of inventions that belong to different classes. In addition, the coated substrate, when examining, is not limited to the claimed process since any coated substrate having the claimed characteristics or properties produced from any process can read on the claimed product. The claimed coated metal substrate can be made by a different conversion coating process such as a coating process that operates at a different temperature range than claimed or for different duration of time or even electrodeposition.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention groups II and III, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 28 February 2007.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 6 recites the limitation "the cations" in line 5. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hacias WO 98/23789(Hacias).

Hacias teaches an aqueous metal surface treatment composition comprising ethoxylated aliphatic alcohol having 18-65 carbon atoms(page 8 lines 22-30), phosphate ions in an amount of at least 0.001 moles/l(page 4, lines 11-15). Hacias also teaches that the ethoxylated aliphatic alcohol can be produced by condensing ethylene oxide with primary straight chain aliphatic alcohols(page 8 lines 25-27), and oxyethylene units in the ethoxylated aliphatic alcohol is 20-80% of the total mass(pages 8 line 32 – page 9 line 1). Hacias further teaches, in one of the references incorporated in Hacias(US 5,547,595 col. 3 lines 47-53), that the ethoxylated aliphatic alcohol is in an amount of 0.2-25%.

Regarding claims 1-5 and 13-14, the concentration of the ethoxylated aliphatic alcohol, its number of carbon atoms, its oxyethylene unit % and the phosphate ion concentration in the treatment composition of Hacias either read on or overlap the claimed ethoxylated aliphatic alcohol and phosphate ion ranges. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of the claimed ethoxylated aliphatic alcohol and phosphate ion ranges from the disclosed ranges of Hacias would have been obvious to one of ordinary skill in the art since Hacias teaches the same utilities in its disclosed ethoxylated aliphatic alcohol and phosphate ion ranges.

Regarding claims 6 and 8-10, the treatment composition of Hacias further comprises claimed metal salts and fatty acids(page 6 lines 11-37), the claimed pH adjusting agent to maintain the claimed pH(page 6 lines 3-10), the claimed primary and secondary organic corrosion inhibitors(page 4 line 28 – page 6 line 2) and the claimed surfactant(page 4 lines 16-20).

Regarding claim 7, Hacias further teaches the presence of 2-130g/l of boric acid and the addition of pH adjusting agent to maintain the pH of the treatment composition between 3-7. The boric compound to treatment composition ratio implicitly taught by Hacias overlaps the claimed boron to composition ratio of 0.002:1.0. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of the claimed boron to composition ratio range from the implicitly disclosed range of Hacias would have been obvious to one of ordinary skill in the art since Hacias teaches the same utilities in its disclosed boron to composition ratio range.

Regarding claim 12, Hacias further teaches that accelerators such as chlorate, hydroxylamine, nitrate, nitrite nitroaromatic compounds can be added to the treatment composition to accelerate the conversion coating process(page 4 lines 20-24). Even though Hacias does not explicitly teach the claimed amount of accelerator, one of ordinary skill in the art would have found it obvious to have adjusted the amounts of accelerator via routine optimization in order achieve particular purposes as taught by Hacias.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hacias WO 98/23789(Hacias) in view of Bershas et al. US 5,584,844(Bershas).

The teachings of Hacias are discussed in paragraph 7 above. However, Hacias does not explicitly teach the claimed use of an antifoam agent.

Bershas teaches an aqueous lubricant and metal surface conditioner comprising water-soluble organic materials of amine oxides and quaternary ammonium salt, phosphate and nitrate(abstract). Bershas further teaches the presence of an antifoam agent in the surface conditioning composition(col. 8 line 47).

Therefore, it would have been obvious to one of ordinary skill in the art to have incorporated the antifoam agent as taught by Bershas into the composition of Hacias in order to reduce the amount of foaming taking place when applying the coating composition.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Church US 6,248,701 B1 teaches a similar metal coating composition as claimed. However, it does not qualify as prior art since it is not "by other" and is not published for at least one year prior to the effective filing date of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LLZ

  
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